

REMARKS/ARGUMENTS

Reconsideration and allowance in view of the foregoing amendment and the following remarks are respectfully requested.

Claims 3-20 are now pending.

The disclosure was objected to because of noted informalities on pages 8 and 9. The specification has been reviewed and revised above bearing in mind the Examiner's objections. It is believed that the specification is now in proper form and it is therefore respectfully requested that the rejection be withdrawn.

Formal drawings are submitted herewith. It is respectfully requested that the herewith formal drawings be substituted for the informal drawings previously filed. It is further respectfully requested that the Examiner acknowledge receipt of and indicate acceptance of the formal drawings in the next Official Action.

Original claim 1 was rejected under 35 USC 102(b) as anticipated by Sugimoto et al. This rejection has been mooted by the amendment to claim 3 to place the same in independent form and the concurrent cancellation of claims 1 and 2.

Claims 2 and 3 were rejected under 35 USC 103(a) as being unpatentable over Sugimoto et al in view of Hölzlein. Applicant respectfully traverses this rejection.

The invention as recited in claim 3 relates to a method for manufacturing a spark plug including conveying a tray having a plurality of insulators each accommodating electric resistive powder into a furnace, thermally processing the plurality of insulators mounted on the tray, conveying the tray out of the furnace, inserting a stem in the hollow inner space of each insulator and providing a windbreak at a side of the tray close to the opening of the furnace through which the tray is removed, thereby preventing the thermally processed insulators from being directly cooled by the flow of air entering the furnace via the opening. The windbreak provided according to the

invention shields the thermally processed insulators that are located close to the opening of the furnace against the flow of air entering the furnace via the opening, thereby preventing the thermally processed insulators located close to the opening from being unevenly cooled by air entering the furnace when the tray supporting the thermally processed insulators is conveyed out of the furnace. The windbreak of the invention shields in particular the portion corresponding to the electric resistor against air entering the furnace.

The primary reference to Sugimoto discloses a manufacturing method for a spark plug. As recognized by the Examiner, however, Sugimoto does not teach or in anyway suggest providing a windbreak as is provided according to the method of the invention.

Recognizing the deficiencies in Sugimoto in this regard, the Examiner relies upon the secondary reference to Hölzlein. It is respectfully submitted that the skilled artisan considering the manufacturing method of Sugimoto would not look to the Hölzlein disclosure, but even if the Hölzlein disclosure was consulted, the method specifically claimed by applicant would still not be anticipated nor obvious.

More specifically, unlike Sugimoto which relates to a manufacturing method for spark plugs, Hölzlein discloses a manufacturing method for semi-conductors. One having ordinary skill in the art of manufacturing spark plugs would not "obviously" look to the Hölzlein disclosure nor consider Hölzlein's disclosure to be relevant to a spark plug manufacturing method because the disclosures of Sugimoto and Hölzlein belong to mutually different technical fields. Even if the skilled artisan were to refer to Hölzlein, it is respectfully submitted that neither Hölzlein or the remaining art of record would motivate that artisan to adopt isolated characteristics of Hölzlein in Sugimoto. In this regard, Hölzlein relates to a process for the thermal annealing of implantation-doped silicon carbide semiconductors in a gas stream. Sugimoto teaches disposing insulators in a furnace and heating them, but these insulators are not placed in a gas stream of the type to which Hölzlein relates. Thus, the "shields" Hölzlein teaches, which are

designed in particular for thermal annealing of semiconductors in a gas stream, would not be seen as needed for and would not obviously be adopted in Sugimoto.

As the CAFC has said, obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination. ACS Hospital Systems v Montefiore Hospital, 221 USPQ 929, 933 (Fed. Cir. 1984). There must be a suggestion in the art relied upon to use what one reference discloses in or in combination with the disclosure of the other reference or references relied upon by the Examiner. In re Grabiak, 226 USPQ 870, 872 (Fed. Cir. 1986).

Furthermore, Hölzlein does not teach or suggest anything about the electric resistor accommodated in the insulator of a spark plug. In this regard, the present invention has the purpose of suppressing a disparity in resistance values of electric resistors accommodated in a plurality of insulators thermally processed together in a furnace. In this respect, Hölzlein fails to disclose the purpose of the present invention and accordingly, the skilled artisan would not recognize from Hölzlein's teachings any use or advantage to incorporating Hölzlein's dummy component or "shield" in Sugimoto's manufacturing process.

It is further respectfully submitted that to the extent Hölzlein teaches the provision of a "shield" for his semiconductor structures, Hölzlein discloses the use of a dummy semiconductor having the same shape and size as the semiconductors that he is processing. In this respect, Hölzlein teaches a dummy product placed at the end of an alignment of products to be processed. Thus, even if Hölzlein were adopted in Sugimoto (which applicant maintains would not be obvious), the result would be dummy insulators provided in line with the insulators to be heated, but there would still be no teaching of a windbreak configured as recited, for example, in applicant's dependent claims.

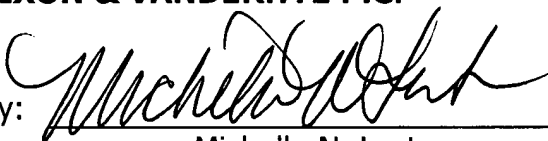
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For all the reasons advanced above, reconsideration and withdrawal of the Examiner's rejection based on Sugimoto and Hölzlein are respectfully requested.

All objections and rejections having been addressed, it is respectfully submitted that the present application is in condition for allowance and an early Notice to that effect is earnestly solicited.

Respectfully submitted,

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